In the Specification:

Insert the following paragraph in the Summary of the Invention at page 4 after line 4.

In an alternative embodiment of the present invention, a mobile communication system includes a mobile antenna arranged to receive a plurality of signals from multiple signal paths from each of plural remote antennas of an external source. The plurality of signals includes a first signal transmitted from a first antenna of the plural remote antennas at a one time and a complement of a conjugate of a second signal transmitted from a second antenna of the plural remote antennas at the one time. The plurality of signals further includes the second signal transmitted from the first antenna at another time and a conjugate of the first signal transmitted from the second antenna at the another time. A correction circuit is coupled to receive a plurality of estimate signals and the plurality of signals. The plurality of estimate signals corresponds to respective signal paths. The correction circuit produces a first symbol estimate in response to the estimate signals, the first signal, and the conjugate of the first signal, and a second symbol estimate in response to the estimate signals, the complement of the conjugate of the second signal, and the second signal.

Rewrite the paragraph at page 6, line 4, as follows.

Referring now to FIG. 3, there is a schematic diagram of a phase correction circuit of the present invention that may be used with a remote mobile receiver. This phase correction circuit receives signals R_j^1 and R_j^2 as input signals on leads 610 and 614 as shown in equations [5-6], respectively.

$$R_j^1 = \sum_{i=0}^{N-1} r_j(i+\tau_j) = \alpha_j^1 S_1 - \alpha_j^2 S_2^* \qquad [5]$$

$$R_j^2 = \sum_{i=N}^{2N-1} r_j(i+\tau_j) = \alpha_j^1 S_2 + \alpha_j^2 S_1^* \qquad [6]$$

The phase correction circuit receives a complex conjugate of a channel estimate of a Rayleigh fading parameter α_j^{1*} corresponding to the first antenna on lead 302 and a channel estimate of another Rayleigh fading parameter α_j^2 corresponding to the second antenna on lead 306. Circuit 300 produces a product of signal R_j^1 and channel estimate α_j^{1*} at lead 304. Circuit 324 produces a product of signal R_j^2 and channel estimate α_j^{1*} at lead 328. Complex conjugates of the input signals are produced by circuits 308 and 330 at leads 310 and ~~322~~ 332, respectively. Circuit 312 produces a product of the conjugate at lead 310 and channel estimate α_j^2 at lead 314. Circuit 334 produces a product of the conjugate at lead 332 and channel estimate α_j^2 at lead 336. Circuit 316 adds the signals at leads 304 and 336 and produces an average at lead 318. Circuit 320 subtracts the signal at lead 314 from the signal at lead 328 and produces an average at lead 322. These ~~input signals and their complex conjugates are multiplied by Rayleigh fading parameter estimate signals and summed as indicated to produce~~ averages are path-specific first and second symbol estimates at respective output leads 318 and 322 as in equations [7-8].

Respectfully submitted,

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